CLAIM AMENDMENTS

1. (original) A method for isolating a channel of interest from a set of channels in a multimedia system, the method comprises:

receiving the set of channels as a stream of data;

interpreting segments of the stream of data to identify data of the channel of interest;

interpreting the data of the channel of interest to determine type of the data;

processing the data of the channel of interest based on the type of data to produce processed data; and

providing the processed data for display.

2. (original) The method of claim 1 further comprises:

receiving the stream of data in packets that include a header portion and a payload portion; and

interpreting the header portion to determine which of the packets contain the data of the channel of interest.

3. (original) The method of claim 2, wherein the interpreting the data to determine the type of data further comprises:

interpreting at least one of: the header portion and a header section of the payload portion to determine the type of data.

4. (original) The method of claim 3, wherein the processing the data further comprises:

when the type of data is video data, converting the data of the channel of interest into at least one of: YUV data and RGB data; and

storing the at least one of the YUV data and the RGB data in a frame buffer to produce the processed data.

5. (original) The method of claim 4, wherein the providing the processed data further comprises:

retrieving the at least one of the YUV data and the RGB data from the frame buffer at a display rate to produce retrieved display data; and

rendering the retrieved display data for display.

6. (original) The method of claim 4 further comprises:

Huffman decoding the video data to produce Huffman decoded data;

de-zigzagging the Huffman decoded data to produce de-ZZ data;

de-quantizing the de-ZZ data to produce de-Q data;

performing an inverse discrete cosine transform function upon the de-Q data to produce IDCT data; and

performing at least one of motion compensation and scaling upon the IDCT data to produce the YUV data.

7. (original) The method of claim 6 further comprises:

converting the YUV data into the RGB data; and

storing the at least one of the YUV data and the RGB data.

8. (original) The method of claim 3, wherein the processing the data further comprises:

when the type of data is audio data, converting the data of the channel of interest into pulse code modulation (PCM) data; and

storing the PCM data in a frame buffer to produce the processed data.

9. (original) The method of claim 8, wherein the providing the processed data further comprises:

retrieving the PCM data from the frame buffer at a display rate to produce retrieved display data; and

providing the retrieved display data to at least one speaker assembly.

10. (original) The method of claim 3, wherein the processing the data further comprises:

when the type of data is application data, storing the application data in memory to produce the processed data.

11. (original) The method of claim 10, wherein the providing the processed data further comprises:

retrieving the processed data from memory;

providing the processed data to a processor;

generating, by the processor, video data from the processed data; and

providing the video data to a display.

12. (original) The method of claim 1 further comprises:

receiving the stream of data in frames that include a frame header and a frame payload; and

interpreting the frame header to determine which of the frames contain the data of the channel of interest.

13. (original) The method of claim 1 further comprises:

transmitting a channel selection request, wherein the channel selection request identifies the channel of interest.

14. (original) The method of claim 1, wherein the receiving the stream of data further comprises:

decoding the stream of data to recapture data of a channel of interest.

15. (original) The method of claim 14, wherein the decoding further comprises at least one of:

multilevel decoding of the stream of data;

non return to zero (NRZ) decoding of the stream of data;

Manchester decoding of the stream of data;

block decoding of the stream of data; and

nB/mB decoding of the stream of data, where $n < m$.

16-33 (cancelled)

34. (original) A client module for use in a multimedia system, the client module comprises:

network interface controller operably coupled to receive encoded channel data that represents a set of channels, wherein the network interface controller extracts data relating to a channel of interest from the encoded channel data;

video decoder operably coupled to decode the data relating to the channel of interest to produce decoded video data;

memory operably coupled to store the decoded video data; and

rendering module operably coupled to retrieve the decoded video data from the memory and to render video images from the decoded video data.

35. (original) The client module of claim 34 further comprises:

a display operably coupled to the rendering module, wherein the display displays the rendered video images.

36. (original) The client module of claim 34 further comprises:

host processor;

host memory; and

interface module operably coupled to the host processor, the host memory, and the rendering module, wherein the host processor controls storing the rendered video images in the host memory, controls displaying of the rendered video images, and controls selecting the channel of interest.

37. (original) The client module of claim 34, wherein the network interface controller further comprises:

transmitting module operably coupled to transmit a channel selection request.

38. (original) The client module of claim 37 further comprises:

microphone for capturing audio signals; and

audio processor operably coupled to convert the audio signals into digitized audio signals, wherein the digitized audio signals are provided to the transmitting module.

39. (original) The client module of claim 37 further comprises:

video camera for capturing video signals; and

video processor operably coupled to convert the video signals into digitized video data, wherein the digitized video data is provided to the transmitting module.

40. (original) The client module of claim 34, wherein the network interface controller further comprises:

carrier sense multiple access module for detecting internet data packets within the encoded channel data.

41. (original) The client module of claim 34, wherein the video decoder further comprises:

Huffman decoder operably coupled to decode the data relating to the channel of interest to produce Huffman decoded data;

de-zigzagging module operably coupled to process the Huffman decoded data to produce de-ZZ data;

de-quantizing module operably couple to process the de-ZZ data to produce de-Q data;

inverse discrete cosine transform module operably coupled to perform an inverse discrete cosine transform function upon the de-Q data to produce IDCT data; and

motion compensation and scaling module operably coupled to determine at least one of motion compensation and scaling of the IDCT data to produce the YUV data as the decoded video data.

42. (original) An apparatus for isolating a channel of interest from a set of channels in a multimedia system, the apparatus comprises:

processing module; and

memory operably coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to:

receive the set of channels as a stream of data;

interpret segments of the stream of data to identify data of the channel of interest;

interpret the data of the channel of interest to determine type of the data;

process the data of the channel of interest based on the type of data to produce processed data; and

provide the processed data for display.

43. (original) The apparatus of claim 42, wherein the memory further comprises operational instructions that cause the processing module to:

receive the stream of data in packets that include a header portion and a payload portion; and

interpret the header portion to determine which of the packets contain the data of the channel of interest.

44. (original) The apparatus of claim 43, wherein the memory further comprises operational instructions that cause the processing module to interpret the data to determine the type of data by:

interpreting at least one of: the header portion and a header section of the payload portion to determine the type of data.

45. (original) The apparatus of claim 44, wherein the memory further comprises operational instructions that cause the processing module to process the data by:

when the type of data is video data, converting the data of the channel of interest into at least one of: YUV data and RGB data; and

storing the at least one of the YUV data and the RGB data in a frame buffer to produce the processed data.

46. (original) The apparatus of claim 45, wherein the memory further comprises operational instructions that cause the processing module to provide the processed data by:

retrieving the at least one of the YUV data and the RGB data from the frame buffer at a display rate to produce retrieved display data; and

rendering the retrieved display data for display.

47. (original) The apparatus of claim 45, wherein the memory further comprises operational instructions that cause the processing module to:

Huffman decode the video data to produce Huffman decoded data;

de-zigzag the Huffman decoded data to produce de-ZZ data;

de-quantize the de-ZZ data to produce de-Q data;

perform an inverse discrete cosine transform function upon the de-Q data to produce IDCT data; and

perform at least one of motion compensation and scaling upon the IDCT data to produce the YUV data.

48. (original) The apparatus of claim 47, wherein the memory further comprises operational instructions that cause the processing module to:

convert the YUV data into the RGB data; and

store the at least one of the YUV data and the RGB data.

49. (original) The apparatus of claim 44, wherein the memory further comprises operational instructions that cause the processing module to process the data by:

when the type of data is audio data, converting the data of the channel of interest into pulse code modulation (PCM) data; and

storing the PCM data in a frame buffer to produce the processed data.

50. (original) The apparatus of claim 49, wherein the memory further comprises operational instructions that cause the processing module to provide the processed data:

retrieving the PCM data from the frame buffer at a display rate to produce retrieved display data; and

providing the retrieved display data to at least one speaker assembly.

51. (original) The apparatus of claim 44, wherein the memory further comprises operational instructions that cause the processing module to process the data by:

when the type of data is application data, storing the application data in memory to produce the processed data.

52. (original) The apparatus of claim 51, wherein the memory further comprises operational instructions that cause the processing module to provide the processed data by:

retrieving the processed data from memory;

providing the processed data to a processor;

generating, by the processor, video data from the processed data; and

providing the video data to a display.

53. (original) The apparatus of claim 42, wherein the memory further comprises operational instructions that cause the processing module to:

receive the stream of data in frames that include a frame header and a frame payload; and

interpret the frame header to determine which of the frames contain the data of the channel of interest.

54. (original) The apparatus of claim 42, wherein the memory further comprises operational instructions that cause the processing module to:

transmit a channel selection request, wherein the channel selection request identifies the channel of interest.

55. (original) The apparatus of claim 42, wherein the memory further comprises operational instructions that cause the processing module to receive the stream of data:

decoding the stream of data to recapture data of a channel of interest.

56. (original) The apparatus of claim 55, wherein the memory further comprises operational instructions that cause the processing module to decode by at least one of:

multilevel decoding of the stream of data;

non return to zero (NRZ) decoding of the stream of data;

Manchester decoding of the stream of data;

block decoding of the stream of data; and

nB/mB decoding of the stream of data, where $n < m$.

57-74. (cancelled)